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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of	:	Customer Number: 46320
	:	
Yuhji YAMASHITA, et al.	:	Confirmation Number: 2216
	:	
Application No.: 10/673,812	:	Group Art Unit: 2143
	:	
Filed: September 29, 2003	:	Examiner: M. Fearer
	:	
For: RELAY PROCESSING APPARATUS, CONTROL METHOD AND PROGRAM THEREFOR, AND TERMINAL CONTROL SERVER		

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed October 15, 2008, wherein Appellants appeal from the Examiner's rejection of claims 1-9.

I. REAL PARTY IN INTEREST

This application is assigned to IBM Corporation by assignment recorded on September 29, 2003, at Reel 014565, Frame 0079.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals and interferences.

III. STATUS OF CLAIMS

Claims 1-9 are pending and three-times rejected in this Application. It is from the multiple rejections of claims 1-9 that this Appeal is taken.

IV. STATUS OF AMENDMENTS

The claims have not been amended subsequent to the imposition of the Third and Final Office Action dated July 15, 2008 (hereinafter the Third Office Action).

V. SUMMARY OF CLAIMED SUBJECT MATTER

1 Referring to Figures 2 and 3 and also to independent claim 1, a relay processing
2 apparatus 20 for relaying communications between a control program 250 that generates control
3 commands for a terminal 100 (lines 3-4 of paragraph [0011]) and a process for an HTTP server
4 program 210 that returns to the terminal 100 (lines 4-5 of paragraph [0011]) a command
5 constituting an HTTP response to a HTTP request received from the terminal 100 is disclosed
6 (lines 6-7 of paragraph [0011]). The terminal request processor 220 initiates the control program
7 250 upon the reception of a function call from the HTTP server program 210 that initially
8 received the HTTP request from the terminal 100 (lines 3-6 of paragraph [0012]). A control
9 request processor 230 receives, from the control program 250, a first command generated as a
10 response to the function call (lines 1-3 of paragraph [0014]) and, transmits to the terminal request
11 processor 220, a notification S350 that the first command has been received (lines 4-7 of
12 paragraph [0014]; lines 15-17 of paragraph [0016]). The terminal request processor 220 includes
13 means, responsive to the reception notification, for returning the first command to the HTTP
14 server program in S380 (lines 2-4 of paragraph [0013]; lines 3-6 of paragraph [0017]), and

1 means in the HTTP server program 210 for returning the command S390 to the terminal 100 in
2 the HTTP response issued for the HTTP request (lines 5-12 of paragraph [0013]; lines 6-10 of
3 paragraph [0017]).

4 Referring to Figure 3 and also to independent claim 8, a method for controlling a relay
5 processing apparatus, for relaying communications between a process for a control program that
6 generates control commands for a terminal and a process for an HTTP server program that
7 returns, to the terminal, a command constituting an HTTP response to a HTTP request received
8 from the terminal is disclosed. A terminal request processing step S320 initiates the process
9 performed by the control program (lines 10-13 of paragraph [0015]) upon the reception of a
10 function call S310 (lines 4-6 of paragraph [0015]) from the HTTP server program that initially
11 received S300 the HTTP request (lines 2-4 of paragraph [0015]). In S330, the control request
12 processing step receives, from the control program, a command corresponding to a function call
13 (lines 1-5 of paragraph [0016]), and in S350, transmits a notification that the command has been
14 received (lines 15-17 of paragraph [0016]). In S380, when the reception notification is received,
15 the processing is returned to the HTTP server program from the function call issued at the
16 terminal request processing step (lines 1-5 of paragraph [0017]). In S390, the command is
17 included in the HTTP response issued for the HTTP request (lines 6-10 of paragraph [0017]).

18 Referring to Figure 2 and also to independent claim 9, a terminal control server 200 for
19 controlling a terminal 100 through a network is disclosed. A terminal request processor 220
20 initiates a process for a control program 250 that generates control commands for the terminal
21 100 (lines 4-5 of paragraph [0011]; lines 3-6 of paragraph [0012]) and a process for an HTTP
22 server program 210 that returns, to the terminal 100, a command constituting an HTTP response
23 to a HTTP request received from the terminal 100 (lines 6-7 of paragraph [0011]; lines 5-12 of

1 paragraph [0013]), and for initiating a process for the control program 250 upon the reception of
2 a function call from the HTTP server program 210 that initially received the HTTP request (lines
3 3-5 of paragraph [0012]). A control request processor 230 receives from the control program
4 250 a command corresponding to a function call (lines 3-4 of paragraph [0013]), and for
5 transmitting to the terminal request processor 220 a notification that the command has been
6 received (lines 1-3 of paragraph [0013]). Upon the reception notification being received, the
7 terminal request processor 220 is permitted to return the processing to the HTTP server program
8 210 (lines 4-6 of paragraph [0013]), and the HTTP server program 210 is permitted to return the
9 command included in the HTTP response issued for the HTTP request (lines 9-12 of paragraph
10 [0013]).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1 and 8-9 were rejected under 35 U.S.C. § 103 for obviousness based upon Vilaghy et al., "e-business Cookbook for z/OS Volume 1. Technology Introduction" (hereinafter Vilaghy);

2. Claim 2 was rejected under 35 U.S.C. § 103 for obviousness based upon Vilaghy in view of Hoffman, U.S. Patent No. 6,728,769;

3. Claims 3 and 4 were rejected under 35 U.S.C. § 103 for obviousness based upon Vilaghy in view of Chakraborty et al., U.S. Patent Publication No. 2004/0107282 (hereinafter Chakraborty);

4. Claim 5 was rejected under 35 U.S.C. § 103 for obviousness based upon Vilaghy in view of Devine et al., U.S. Patent No. 6,598,167 (hereinafter Devine);

5. Claim 6 was rejected under 35 U.S.C. § 103 for obviousness based upon Vilaghy in view of Perlman et al., U.S. Patent No. 6,510,523 (hereinafter Perlman); and

6. Claim 7 was rejected under 35 U.S.C. § 103 for obviousness based upon Vilaghy in view of Kanemaki et al., U.S. Patent Publication No. 2002/0138761 (hereinafter Kanemaki).

VII. ARGUMENT

**THE REJECTION OF CLAIMS 1 AND 8-9 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS
BASED UPON VILAGHY**

For convenience of the Honorable Board in addressing the rejections, claims 8 and 9 stand or fall together with independent claim 1.

On October 10, 2007, the Patent Office issued the "Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*," 73 Fed. Reg. 57,526 (2007) (hereinafter the Examination Guidelines). Section III is entitled "Rationales To Support Rejections Under 35 U.S.C. 103." Within this section is the following quote from the Supreme Court: "rejections on obviousness grounds cannot be sustained by merely conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Referring to the first column on page 57,529 of the Examination Guidelines, the following is a list of rationales that may be used to support a finding of obviousness under 35 U.S.C. § 103:

(A) Combining prior art elements according to known methods to yield predictable results;

(B) Simple substitution of one known element for another to obtain predictable results;

(C) Use of known technique to improve similar devices (methods, or products) in the same way;

(D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;

(E) "Obvious to try" - choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

(F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;

(G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Upon viewing the Examiner's analysis on pages 3-5 of the Third Office Action, the Examiner appears to be employing rationale (G). If the Examiner is not relying upon rationale (G), Appellants request that the Examiner clearly identify the rationale, as described in the Examination Guidelines, being employed by the Examiner in rejecting the claims under 35 U.S.C. § 103.

Referring again to rationale (G), as discussed on page 57,534 of the Examination Guidelines, the following findings of fact must be articulated by the Examiner:

(1) a finding that there was some teaching, suggestion, or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;

(2) a finding that there was reasonable expectation of success; and

1 (3) whatever additional findings based on the Graham factual inquiries
2 may be necessary, in view of the facts of the case under consideration, to explain
3 a conclusion of obviousness.
4

5 Referring to the paragraph entitled "Office Personnel as Factfinders" on page 57,527 of
6 the Examination guidelines, the following was stated:

7 Office personnel fulfill the critical role of factfinder when resolving the
8 *Graham* inquiries. It must be remembered that while the ultimate determination of
9 obviousness is a legal conclusion, the underlying *Graham* inquiries are factual.
10 When making an obviousness rejection, Office personnel must therefore ensure
11 that the written record includes findings of fact concerning the state of the art and
12 the teachings of the references applied. In certain circumstances, it may also be
13 important to include explicit findings as to how a person of ordinary skill would
14 have understood prior art teachings, or what a person of ordinary skill would have
15 known or could have done. Factual findings made by Office personnel are the
16 necessary underpinnings to establish obviousness.
17

18 In Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), the Supreme Court set
19 forth the factual inquiries that are to be applied when establishing a background for determining
20 obviousness under 35 U.S.C. 103. These factual inquiries are summarized as follows:

- 21 (A) Determine the scope and content of the prior art;
22 (B) Ascertain the differences between the prior art and the claims at issue;
23 (C) Resolve the level of ordinary skill in the pertinent art; and
24 (D) Evaluate any indicia of nonobviousness.
25

26 However, in order to make a proper comparison between the claimed invention and the prior art,
27 the language of the claims must first be properly construed. See In re Paulsen, 30 F.3d 1475,
28 1479 (Fed. Cir. 1994). See also, Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1567-68

(Fed. Cir. 1987) (In making a patentability determination, analysis must begin with the question, "what is the invention claimed?" since "[c]laim interpretation, ... will normally control the remainder of the decisional process.") See Gechter v. Davidson, 116 F.3d 1454, 1460 (Fed. Cir. 1997) (requiring explicit claim construction as to any terms in dispute).

Upon reviewing the Examiner's analysis in view of the requirements discussed above necessary for the Examiner to establish a prima facie case of obviousness, Appellant recognize several deficiencies in the Examiner's analysis.

On pages 2 and 3 of the Second Response filed February 19, 2008 (hereinafter the Second Response), Appellants noted that the Examiner has failed to address Appellants' arguments in the First Response. Appellants also requested that the Examiner specifically identify, within each reference cited by the Examiner, each feature being relied upon in the Examiner's analysis to allegedly teach the following claimed limitations: (i) control program, (ii) terminal, (iii) HTTP server program, (iv) terminal request processor, (v) control request processor, (vi) a notification that a first command has been received, (vii) returning the first command to the HTTP server program, and (viii) returning the command to the terminal in the HTTP response.

The Examiner's response to this request is found pages 14-19 of the Third Office Action. For ease of references, the Examiner's analysis is condensed below:

Claimed Feature	Teaching within Vilaghy
control program	"servlets that control application flow" see pg. 23 and Fig. 2-8 on pg. 22
terminal	Web terminal translation program, DFHWBTTA, pg. 156 and Fig. 13-5
HTTP server program	HTTP server; Fig. 8-1 and pg. 113
terminal request processor	web container; Fig. 10-3 and pg. 133
control request processor	servlets; Fig. 10-3 and pg. 133
notification that a first command has been received	"a notification mechanism between JavaBeans to announce that something has happened"; pg. 16
returning the first command to the HTTP server program	"Response in Figure 10-4 read as returning said command to HTTP server and client terminal;" pg. 134
returning the command to the terminal in the HTTP response	Same as immediately above.

The Examiner's response illustrates how the Examiner has mischaracterized the scope and content of the applied prior art. However, before addressing these issues, Appellants note that although the Examiner referred to the "Web terminal translation program" as teaching the claimed terminal, a better assertion, which is also more consistent with the Examiner's subsequently analysis, would have been to assert that the "client browser" teaches the claimed terminal. The client browser is described and illustrated throughout Vilaghy, e.g., in Fig. 10-3.

Referring to Fig. 2-8 on pg. 22, which illustrates a servlet (allegedly corresponding to the claimed "control program") within a web container and to Fig. 10-3 on pg 133, which also illustrates a servlet (allegedly corresponding to the claimed "control request processor"), these separate references to "servlets" by the Examiner appear to be the same teaching. Thus, the

1 Examiner is relying upon the same teaching within Vilaghy to teach the claimed "control
2 program" and "control request processor."

3
4 As claimed, the control request processor receives, from the control program, a first
5 command generated as a response to the function call. However, since the Examiner is relying
6 upon the same teaching (i.e., servlet) within Vilaghy to teach the claimed "control program" and
7 "control request processor," Appellants are unclear as to how the Examiner can characterize
8 Vilaghy as teaching both of these limitations. Therefore, the Examiner has mischaracterized the
9 scope and content of Vilaghy.

10
11 With regard to the claimed "notification (S350) that said first command has been
12 received," the Examiner identified, as allegedly teachings these limitations, a teaching within
13 Vilaghy of "a notification mechanism between JavaBeans to announce that something has
14 happened." As also claimed, the control request processor (allegedly disclosed by the servlets)
15 transmits the notification to the terminal request processor (allegedly disclosed by the web
16 container). However, referring to Fig. 2-8, an Enterprise Bean (i.e., a JavaBean) is found within
17 the EJB (Enterprise JavaBean) Container. Referring to Fig. 2-9 and 10-3, the EJB Container is a
18 separate entity from either the web container (allegedly teaching the terminal request processor)
19 or the servlets (allegedly teaching the control request processor). Thus, the Examiner has further
20 mischaracterized the scope and content of Vilaghy.

21
22 Returning to the Examiner's initial analysis, Appellants note that the statement of the
23 rejection found on pages 2-13 of the Third Office Action is substantially identical with the

1 statement of the rejection on pages 2-17 of the Second Office Action. Referring to pages 3-5 of
2 the Third Office Action, the Examiner only refers to Vilaghy in three instances within the
3 statement of the rejection – (1) on line 5 of page 3; (2) on line 5 of page 4; and (3) on line 5 of
4 page 5. However, in none of these instances does the Examiner ascertain the differences
5 between the prior art (i.e., Vilaghy) and the claims at issue.

6
7 The Examiner has rejected the claims under 35 U.S.C. § 103 so Appellants presume that
8 the Examiner believes that Vilaghy does not identically disclose all of the claimed limitations.
9 However, the Examiner fails to identify those limitations that Vilaghy fails to teach. Thus, the
10 Examiner has failed to properly ascertain the differences between Vilaghy and the claims at issue,
11 which is one of the *Graham* findings of fact that must be made by the Examiner.

12
13 Turning to the first full paragraph on page 5 of the Third Office Action, the Examiner
14 asserted the following:

15 Therefore, it would have been obvious to a person of ordinary skill in the art at the time
16 the invention was made to incorporate a CICS WebServer Plugin wherein an HTTP Server
17 receives the HTTP request and servlets and JSPs that contain the presentation logic to format the
18 data coming from the back-end systems as taught by Vilaghy et al. with a Web component tier that
19 gets client requests (HTTP,HTTPS), analyzes the requests and decides to respond with a file
20 (HTML, images) or calls a program (servlet) to do some part of the server-side processing
21 requested by the client and a response created by a servlet is passed back to an HTTP server and
22 the HTTP server passes back the response produced by the servlet to the client, and if the client is
23 a browser, the response will contain HTML formatted data as taught by Vilaghy et al. for the
24 purpose of a relay processing apparatus wherein an HTTP client can communicate with a back-end
25 application.

26
27 Appellants are entirely unclear as to the relevance of these assertions. The Examiner does not
28 refer to the actual language of the claims. Moreover, the Examiner does not precisely describe
29 what would be the alleged modification to the teachings of Vilaghy. Like most of the Examiner's

1 other analysis, these assertions by the Examiner are made confusing by their failure to refer to
2 the language of the claims.

3
4 Notwithstanding the uncertain relevance of the Examiner's obviousness analysis, as noted
5 above, the Examiner has mischaracterized the scope and content of Vilaghy and failed to
6 properly ascertain the differences between Vilaghy and the claims at issue. Therefore, the
7 Examiner has failed to establish a prima facie case of obviousness.

8
9 **THE REJECTION OF CLAIM 2 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON**
10 **VILAGHY IN VIEW OF HOFFMAN**

11 For convenience of the Honorable Board in addressing the rejections, claim 2 stands or
12 falls together with independent claim 1.

13
14 Claim 2 depends ultimately from independent claim 1, and Appellants incorporate herein
15 the arguments previously advanced in traversing the imposed rejection of claim 1 under 35 U.S.C. §
16 102 for anticipation based upon Vilaghy. The Examiner's secondary reference to Hoffman does not
17 cure the argued deficiencies of Vilaghy. Thus, even if the applied prior art were combined in the
18 manner suggested by the Examiner, the claimed invention would not result. Appellants, therefore,
19 respectfully submit that the imposed rejection of claim 2 under 35 U.S.C. § 103 for obviousness
20 based upon Vilaghy in view of Hoffman is not viable.

1 **THE REJECTION OF CLAIMS 3 AND 4 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED**
2 **UPON VILAGHY IN VIEW OF DEVINE**

3 For convenience of the Honorable Board in addressing the rejections, claims 3 and 4
4 stand or fall together with independent claim 1.

5
6 Claims 3 and 4 depend ultimately from independent claim 1, and Appellants incorporate
7 herein the arguments previously advanced in traversing the imposed rejection of claim 1 under 35
8 U.S.C. § 102 for anticipation based upon Vilaghy. The Examiner's secondary reference to
9 Chakraborty does not cure the argued deficiencies of Vilaghy. Thus, even if the applied prior art
10 were combined in the manner suggested by the Examiner, the claimed invention would not result.
11 Appellants, therefore, respectfully submit that the imposed rejection of claims 3 and 4 under 35
12 U.S.C. § 103 for obviousness based upon Vilaghy in view of Chakraborty is not viable.

13
14 **THE REJECTION OF CLAIM 5 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON**
15 **VILAGHY IN VIEW OF DEVINE**

16 For convenience of the Honorable Board in addressing the rejections, claim 5 stands or
17 falls together with independent claim 1.

18
19 Claim 5 depends ultimately from independent claim 1, and Appellants incorporate herein
20 the arguments previously advanced in traversing the imposed rejection of claim 1 under 35 U.S.C. §
21 102 for anticipation based upon Vilaghy. The Examiner's secondary reference to Devine does not
22 cure the argued deficiencies of Vilaghy. Thus, even if the applied prior art were combined in the
23 manner suggested by the Examiner, the claimed invention would not result. Appellants, therefore,

respectfully submit that the imposed rejection of claim 5 under 35 U.S.C. § 103 for obviousness based upon Vilaghy in view of Devine is not viable.

THE REJECTION OF CLAIM 6 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON VILAGHY IN VIEW OF PERLMAN

For convenience of the Honorable Board in addressing the rejections, claim 6 stands or falls together with independent claim 1.

Claim 6 depends ultimately from independent claim 1, and Appellants incorporate herein the arguments previously advanced in traversing the imposed rejection of claim 1 under 35 U.S.C. § 102 for anticipation based upon Vilaghy. The Examiner's secondary reference to Perlman does not cure the argued deficiencies of Vilaghy. Thus, even if the applied prior art were combined in the manner suggested by the Examiner, the claimed invention would not result. Appellants, therefore, respectfully submit that the imposed rejection of claim 6 under 35 U.S.C. § 103 for obviousness based upon Vilaghy in view of Perlman is not viable.

THE REJECTION OF CLAIM 7 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON VILAGHY IN VIEW OF KANEMAKI

For convenience of the Honorable Board in addressing the rejections, claim 7 stands or falls together with independent claim 1.

Claim 7 depends ultimately from independent claim 1, and Appellants incorporate herein the arguments previously advanced in traversing the imposed rejection of claim 1 under 35 U.S.C. §

1 102 for anticipation based upon Vilaghy. The Examiner's secondary reference to Kanemaki does
2 not cure the argued deficiencies of Vilaghy. Thus, even if the applied prior art were combined in
3 the manner suggested by the Examiner, the claimed invention would not result. Appellants,
4 therefore, respectfully submit that the imposed rejection of claim 7 under 35 U.S.C. § 103 for
5 obviousness based upon Vilaghy in view of Kanemaki is not viable.

6
7 Conclusion

8 Based upon the foregoing, Appellants respectfully submit that the Examiner's rejections
9 under 35 U.S.C. § 103 based upon the applied prior art is not viable. Appellants, therefore,
10 respectfully solicit the Honorable Board to reverse the Examiner's rejections under 35 U.S.C. § 103.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. §§ 1.17, 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: December 8, 2008

Respectfully submitted,

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CUSTOMER NUMBER 46320

VIII. CLAIMS APPENDIX

1. A relay processing apparatus (200) for relaying communications between a control program (250) that generates control commands for a terminal (100) and a process for an HTTP server program (210) that returns to said terminal a command constituting an HTTP response to a HTTP request received from said terminal, comprising:

a terminal request processor (220) for initiating said control program (250) upon the reception of a function call from said HTTP server program (210) that initially received said HTTP request from the terminal; and

a control request processor (230) for receiving from said control program (250) a first command generated as a response to the function call, and for transmitting to said terminal request processor a notification (S350) that said first command has been received, means in the terminal request processor responsive to the reception notification, for returning the first command to said HTTP server program (S380), and means in the HTTP server program for returning said command (S390) to the terminal in said HTTP response issued for said HTTP request.

2. A relay processing apparatus according to claim 1 further comprising means in the terminal for transmitting to the HTTP server program a second HTTP request that includes results from the first command, means in the control request processor for transmitting the results from the first command to the control program, and means in the control program for performing a process corresponding to said results from the first command.

3. A relay processing apparatus according to claim 1, wherein said terminal request processor further comprises means responsive to the function call from said HTTP server program for shifting said terminal request processor into a halted state while maintaining an execution state after transmitting the function call to the control program; and

means responsive to said reception notification from said control request processor for recovering from said halted state and returning processing control and the first command to said HTTP server program.

4. A relay processing apparatus according to claim 1, wherein said control request processor further comprises means for transmitting said reception notification to said terminal request processor and means for shifting into a halted state while maintaining an execution state; and

means responsive to a following second function call from the HTTP server program for recovering from said halted state and returning processing control to said control program.

5. A relay processing apparatus according to claim 1, wherein said terminal request processor further comprises means responsive to a non-receipt of said reception notification from said control request processor within a predetermined period of time for causing the HTTP server program to transmit an HTTP failure response to the terminal.

6. A relay processing apparatus according to claim 1, wherein the function call is a certification request message for requesting the preparation of an electronic certificate that authenticates said terminal and the terminal request processor receives the function call from said

HTTP server program and initiates the process employed by said control program to prepare said electronic certificate;

in accordance with a command received from said control program, said control request processor comprises means to transmit a signature addition command to said terminal containing an electronic signature.

7. The apparatus of claim 6 wherein the terminal request processor further comprises means for receiving a second function call containing a certification request message and an electronic signature from said HTTP server program as a response by the terminal to said signature addition command, and means for forwarding a notification to that effect to said control request processor;

means in the control request processor responsive to the notification of receipt of the second function call for transmitting said certification request message to said control program; and

means in said terminal request processor for transmitting an electronic certificate received from said control program.

8. A method for controlling a relay processing apparatus, for relaying communications between a process for a control program that generates control commands for a terminal and a process for an HTTP server program that returns, to said terminal, a command constituting an HTTP response to a HTTP request received from said terminal, comprising:

a terminal request processing step of initiating said process performed by said control program upon the reception of a function call from said HTTP server program that initially received said HTTP request;

a control request processing step of receiving from said control program a command corresponding to a function call, and for transmitting a notification that said command has been received; and

a step of, when said reception notification is received, the processing is returned to said HTTP server program from said function call issued at said terminal request processing step, and of returning said command included in said HTTP response issued for said HTTP request.

9. A terminal control server for controlling a terminal through a network, comprising:

a terminal request processor for initiating a process for a control program that generates control commands for said terminal and a process for an HTTP server program that returns, to said terminal, a command constituting an HTTP response to a HTTP request received from said terminal, and for initiating a process for said control program upon the reception of a function call from said HTTP server program that initially received said HTTP request; and

a control request processor for receiving from said control program a command corresponding to a function call, and for transmitting to said terminal request processor a notification that said command has been received, wherein, when said reception notification is received, said terminal request processor is permitted to return the processing to said HTTP server program, and said HTTP server program is permitted to return said command included in said HTTP response issued for said HTTP request.

IX. EVIDENCE APPENDIX

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellants in this Appeal, and thus no evidence is attached hereto.

X. RELATED PROCEEDINGS APPENDIX

Since Appellants are unaware of any related appeals and interferences, no decision rendered by a court or the Board is attached hereto.